

ABSTRACT OF THE DISCLOSURE

The invention relates to a method and a system for determining hysteresis of a process device in a process environment. The process comprises collecting (50) second-level sample data y_s and u_s from control and measurement signals u and y of a control circuit. Minute mean values $y(\min)$ and $u(\min)$, which are stored in a database (52), are calculated from these second-level measurement values. The pairs suitable for hysteresis calculation are selected from the minute-level sample pairs u_m and y_m according to a certain procedure. The pairs are also divided into two groups. Unsuitable pairs are rejected (57). Two characteristic curves (54) are calculated from the selected pairs (u_m, y_m) for hysteresis calculation (55). The calculation (55) also includes a routine which evaluates the reliability of the identified hysteresis.